Met Office

NEWS

# Record high temperatures verified

**Author:** Press Office
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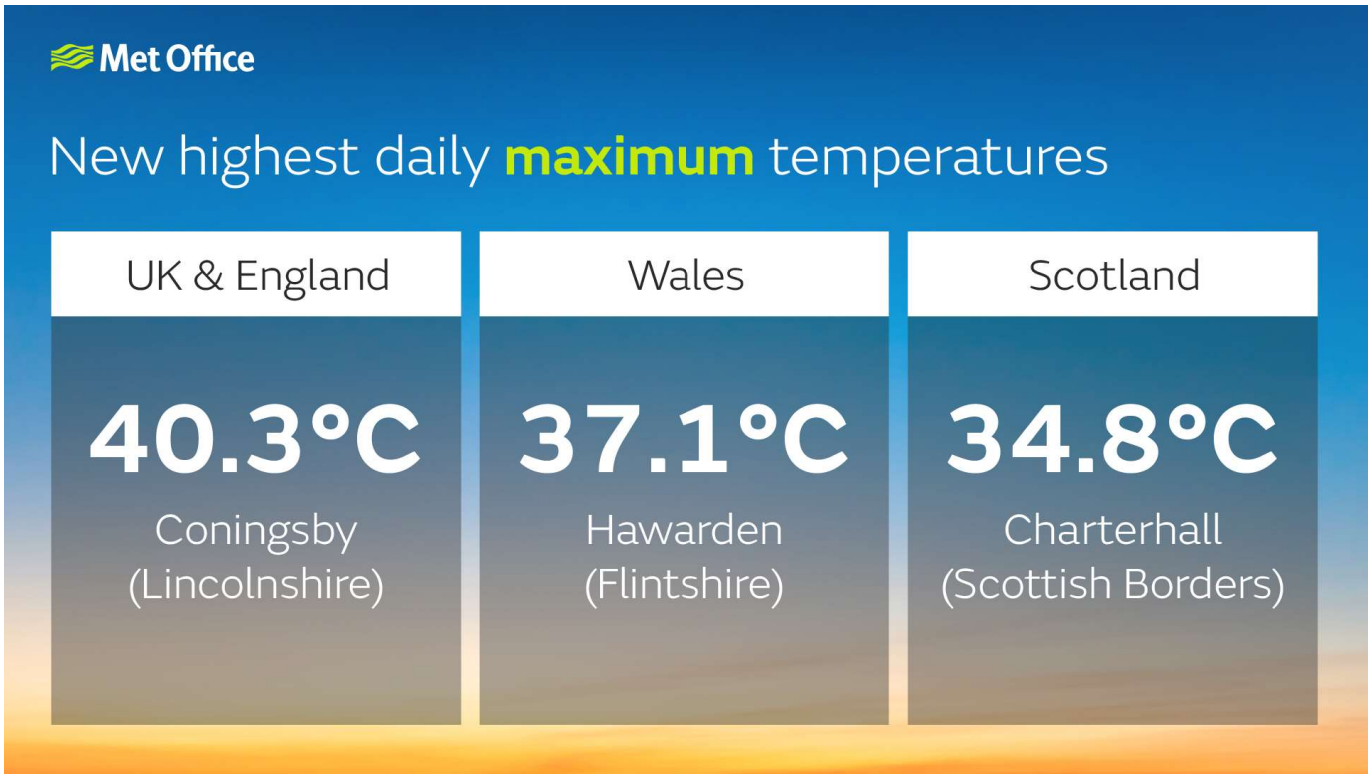
## The UK's new record-high temperature of 40.3°C at Coningsby, Lincolnshire, has been confirmed by the Met Office, following a rigorous process of analysis and quality control.

The confirmation comes as quality control testing, including physical inspections, cross-checking of stations and sites and further testing of equipment was carried out on a number of sites where records were provisionally broken. These quality control measures are in accordance with the internationally-agreed World Meteorological Organisation (WMO) standards, which are required to be accepted as official records.

### Records broken

Record-high temperature records have also been verified for Wales, with 37.1°C at Hawarden Airport, Flintshire, on 18 July now verified. All appropriate standards have also been met to confirm a new record high temperature for Scotland of 34.8°C at Charterhall on 19 July.

A previous provisional reading of 35.1°C was reported at Floors Castle, Borders, but, following inspection, the site set-up was not fully compliant with observing standards so the value did not meet the criteria needed to be declared as an official national record.




A new record high daily minimum temperature for Wales of 24.5°C at Aberporth on 19 July has also been confirmed.

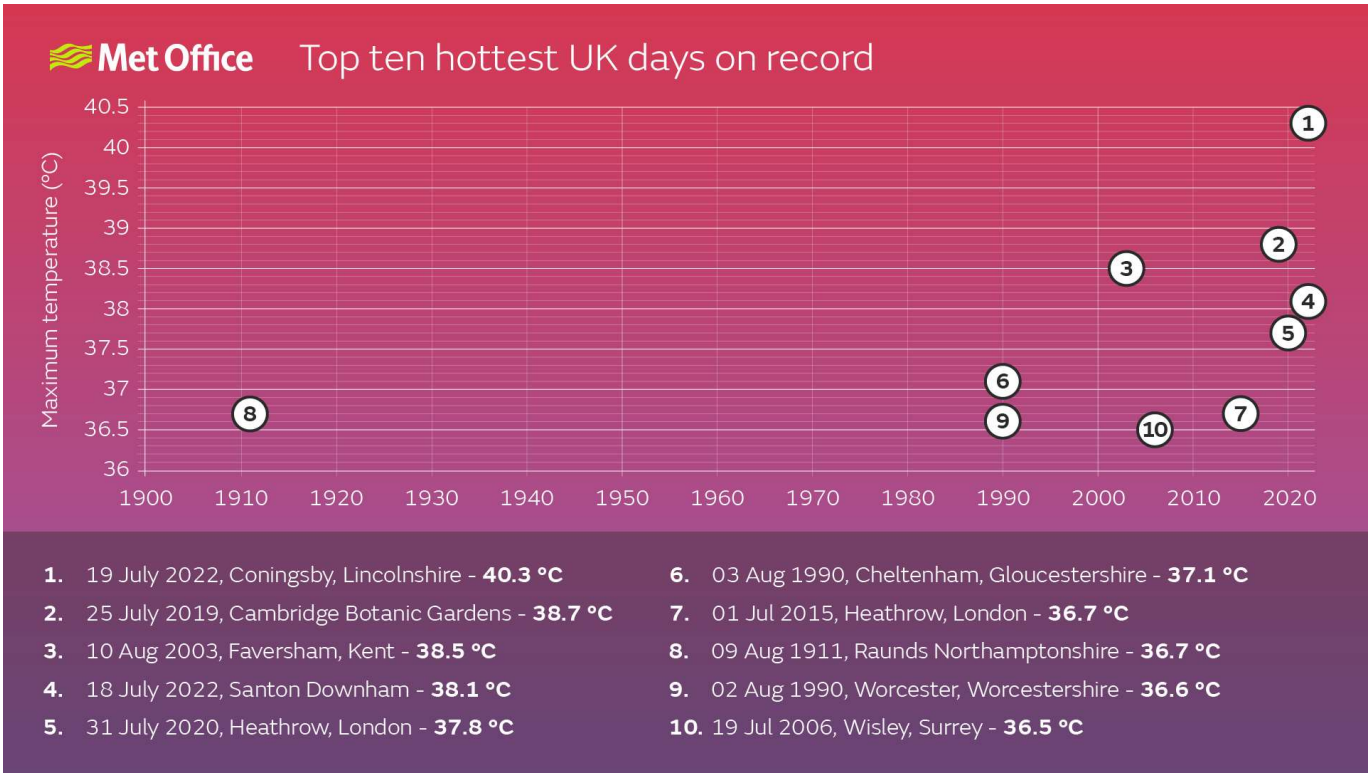
The extreme temperatures were recorded as the UK was impacted by an unprecedented heatwave, with the previous UK temperature record of 38.7°C provisionally met or exceeded at 46 stations, from Kent to North Yorkshire and from Suffolk to Warwickshire. Provisionally, seven stations recorded maximum temperatures in excess 40°C.

Ali Price, whose team is responsible operating the Met Office network of weather observing stations in the UK, said: "Verification of these records has confirmed the extreme heat that we experienced last week.

"The process of verifying these records, using a rigorous process to ensure the readings collected were accurate, is vital to ensure that our temperature records reflect our weather and climate and have not been adversely influenced by other factors.

Dr Mark McCarthy of the National Climate Information Centre said: "Verification of these record-breaking temperatures confirms what we've been saying in the last week, that the UK exceeded 40°C for the first time as part of a widespread and intense heatwave.

"In a climate unaffected by human-induced climate change, it would be virtually impossible for temperatures in the UK to reach 40°C but climate change is already making UK heatwaves more frequent, intense and long-lasting."




Quality control for a provisional new UK highest daily minimum temperature record is still ongoing and will be verified once final checks have been completed. It is possible that further readings could be submitted in the coming weeks which will be included in our official temperature records, subject to routine quality control.

## How are temperatures measured?

Specific temperatures quoted from the Met Office have come from weather stations that meet specific criteria and are regularly maintained and inspected by specialist teams.

Within these official weather stations, thermometers are housed in a white slatted box with its door facing north, called a Stevenson screen. This keeps the thermometer away from direct sunlight but the airflow constant and ensures consistency of readings across the UK.

The locations and mounting heights of these boxes are also standardised, positioned over level grass and away from concrete or hard-standing wherever possible, minimising the influence of man-made surfaces within the surrounding area.

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